

*Philosophy vol 5.*

A  
CALENDAR  
OF THE  
WEATHER,

For the YEAR 1781:

WITH AN

Introductory Discourse on the Moon's Influence  
at common Lunations in general;

AND

On the WINDS at the ECLIPSES in particular.

FOUNDED ON A

Series of regular Observations for some Years;

TAKEN AT

KIMBOLTON in the County of HUNTINGDON.

By B. HUTCHINSON,  
Vicar of that Place, and Prebendary of LINCOLN.

L O N D O N:

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MDCCLXXXII.



Mr. EDWARD ELLICOTT.

S I R,

**T**HE use of the practical part of the Mathematics, in bringing astronomical knowledge to perfection, is the discovery of the present, and gives us, in that science, the superiority over the former ages of the world. You, who are so eminently at the head of the one, and daily conversant in observations on the other, are pointed out as the proper person to whom I should direct the following Tables: especially as you yourself keep similar ones; though for higher, and more beneficial purposes.

A 2

But



But I have a further design in placing your name at the head of something with which I trouble the public, grounded on that vanity which possesses even men involved in philosophic pursuits. That I may be able to shew how long I have been under obligations, and preserved a friendship with one, whose acquaintance is so desirable to all.

I am,

S I R,

Your most obedient,

and most obliged,

humble servant,

Kimbolton,  
25 March, 1782.

B. HUTCHINSON.

P R E-



# P R E F A C E.

**M**Y first intention of keeping a calendar, which I have done for near these last ten years, was to try by regular observation, whether the moon's influence on the weather had any affinity to that on the tides. With this view I formed my plan, as it will appear by the copy herewith submitted to the inspection of the public. The result, as to that point, did not fully answer, I will not say my expectation, but the opinion long received of such an influence.

The sun, without all doubt, by the obliquity and perpendicularity of his rays, is the great natural agent; though perhaps, not the sole arbiter of the weather and seasons. He shews it eminently at the equinoxes and solstices; by his decision at the meridian hours, &c. and his rarefactions are the grand cause of winds; as his motion is of their direction.

This

This is plain from what Lord St. Alban's says of the tendency of the winds to blow from the

West in the morning ;

East in the evening ;

North in the day ;

South in the night ;

That is, they press by their density towards the quarters then rarefied by the presence of the sun.

Observation supports his Lordship's assertion : and thereupon is founded the proverb, " That a westerly wind, and an honest man, go soon to bed at night."

And if the winds are too strong to be entirely stopped from the above cause of contrary refraction, we always see the effect shew itself by the abatement of their violence.

Where the power of the sun is greatest, within or near the tropics, there the effect is periodically determined : and in the monsoons, and trade winds, it is evident the moon and planets do not disconcert his action.

Philosophical knowledge, as well as every other kind of learning, took its rise in a serene

rene part of the globe, in middle latitudes, and nearly in the center of the vast continent of the antient world: the Mediterranean being, with regard to the ocean, only a large bason. That I do not undervalue this sea in the comparison will appear from hence, That Alexander and Cæsar, who were in every respect so capable; and whom it so highly concerned to know the ebbing and flowing of the tide, were both ignorant of that phenomenon, till the former experienced it on the shores of India, the latter on the coast of Gaul.

I am unacquainted with what observations, or whether any, have been accurately made of the flux and reflux of the water in the upper end of the Levant, or whether they apparently exist. At any rate, the difference between high and low water mark must be very little. Therefore the moon's influence in such midland situation on the winds and weather, may be expected to shew itself more pointedly there, in her periods, when she acts upon fluid bodies immediately in conjunction or in opposition to the sun's gravitating power; not having any currents or great agitation of waters to break in upon  
the



the regularity of her effects on the air or atmosphere.

But we are placed on the lee-shore (for our most constant and strongest winds are from the westward) of a vast conflux of a strongly agitated ocean; forcing its way through channels variously confined in different directions; dashing against large promontories, with which our coast abounds. And, what is equal to all the rest, we are not far enough removed from the polar regions, where the freezing and thawing of waters, powerful agents on the weather, are in the extreme, and must have proportional effects; even sufficient to destroy the gentle impressions made by the moon, and consequently by the other planets. If mines too have, as is by some imagined, any influence from their aptness to expire subterraneous steams and condensations, they may be supposed to have some share here in counteracting the marked periodical efforts of the moon: since this country beyond all doubt, abounds with them more than any other.

In short, that the moon acts with a considerable degree of power on the weather cannot be doubted; since weather, that is,  
the

the alteration or modes of it, is nothing more than a difference of the motions of fluids; and that she influences these motions is very manifest in the waters, and in the humours even of animal bodies: and why not in the air, which is also a fluid? but this fluid has such other distinct properties, and accidents, particularly in our climate and situation, that nothing with certainty, I think, can be expected concerning her fixed periodical influence at the conjunctions, to afford us sufficient data for the sure prognostic of wind and weather; which is all, from the observations I have made, that I presume to advance.

What the multitude say, or such of the almanack-writers, who in this instance chime in with, and feed their prejudices, is not of consequence to deserve serious refutation. But if there are found gentlemen of literature, who fall in with their opinion, such merit from me a more respectful attention.

Now let it be considered, that what the poets on georgical subjects, early by repetition stamped on the memory, have said, must of course make a lasting impression.

To save the trouble of hunting for these authorities, as they lie scattered in authors of antiquity, take them collected in their full force by one, whose indefatigable industry and great genius, led directly to the study of natural history, connected as it must always be with astronomy.

There is nothing can affect the credit of this illustrious writer, but the nature of the times in which he lived; when inventive parts were more employed than experiment, and a strict scrutiny of facts.

Pliny's words are, (l. 18. cap. 35.) Proxima sint jure lunæ præfagia. Quartam eam maximè observat Ægyptus. Si splendens exorta puro nitore fulsit, serenitatem: si rubicunda, ventos: si nigra, pluvias portendere creditur. In quinta cornua ejus obtusa, pluviam: erecta & infesta ventos semper significant: quarta tamen maxime. Cornu ejus septentrionale acuminatum atque rigidum, illum præfagit ventum: inferius, austrum: utraque recta, noctem ventosam.

Si quartam orbis rutilus cingit, ventos & imbres præmonebit. Apud Varronem ita est: si quarto die Luna erit directa, magnam tempestatem in mari præfagiet, nisi si coronam



coronam circa se habebit, & eam sinceram : quoniam illo modo non ante plenam lunam hyematurum ostendit. Si plenilunio per dimidium pura erit, dies serenos significabit : si rutila, ventos : nigrescens, imbres. Si caligo orbis nubem incluserit, ventos, quàm se ruperit : si gemini orbes cinxerint, majorem tempestatem. Et magis, si tres erunt, aut nigri, aut interrupti atque distracti. Nascens Luna, si cornu superiore obatro surget, pluvias decrescens dabit : si inferiore, ante plenilunium : si in media nigritia illa fuerit, imbrem in plenilunio. Si plena circa se habebit orbem, ex qua parte is maxime splendeat, ex ea ventum ostendet. Si in ortu cornua crassiora fuerint, horridam tempestatem. Si ante quartam non apparuerit, vento favonio-flante, hyemalis toto mense erit. Si xvi. vehementius flammea apparuerit, asperas tempestates præfagiet. Sunt & ipsius Lunæ octo articuli, quoties in angulos solis incidit, plerisque inter eos tantum observantibus præfagia ejus, hoc est, tertia, septima, undecima, dicimaquinta, decimanona, vigesima tertia, vigesima septima, & interlunium.

Now here is, to mention no other, the new and full moon of course, the 3d, 4th, 5th, 7th, 11th, 19th, 23d, and 27th days of her age, all given as times of observation; that is, as times of influence. This throws some suspicion of uncertainty on the whole: at least it shews, that their favourite astrology was concerned in antient astronomical calculations. And moderns, who may be more addicted to classic learning than philosophical inquiries, founded on the now confessed only good ground of careful experiment, may by the above authority be led to conclude, that when on some of the above pointed days, the weather answers to the prediction there given, it will do so on the rest; to which kind of conclusion, however unsafe, we are all a little too liable.

What regards the appearance of the moon, as to her colour, the sharpness or bluntness of her horns (but not their position) her accompaniment of circles, &c. these all depending on the condition of the atmosphere, are sure guides to follow.

Lord Bacon has cautioned us from building too much on the authority of antiquity in the case before us: for he says in his natural

tural history of the winds, that, “ Those  
 “ things, which have been spoken by  
 “ the antients concerning winds, and their  
 “ causes, are meerly confused and uncertain,  
 “ and for the most part untrue.”

But after having quoted Acoſta, who aſ-  
 ſerts, that in Peru the winds blow moſt at  
 full moon \*, he leaves this injunction,  
 “ That it were certainly a thing worthy to  
 “ be obſerved, what power the ages and  
 “ motions of the moon have upon the winds,  
 “ ſeeing they have ſome power over the wa-  
 “ ters. As for example, whether the winds  
 “ be not in a greater commotion in full and  
 “ new moons, than in her firſt and laſt quar-  
 “ ters, as we find it to be in the flowings  
 “ of waters: for though ſome do conveni-  
 “ ently feign the command of the moon to  
 “ be over the waters, as the ſun and planets  
 “ over the air; yet it is certain, that the  
 “ water and the air are very homogeneous bo-  
 “ dies; and that the moon next to the ſun,  
 “ hath moſt power over all things here be-  
 “ low.”

\* Horace ſays, l. i. ode 25.

Thracio bacchante magis ſub interlunia vento.

This



This injunction I have complied with a good many years : the scheme of the last year 1781, I here lay before the public, in hopes that it may induce more gentlemen of leisure and curiosity to give their opinion : and if it was thought worth while for a bookseller to publish the year in lines, left blank, all but the three first columns for the day of the month, week and moon, in the manner of memorandum books, it would greatly contribute to their ease, if they approve of the plan here given, and be but attended with a small expence.

But to return to his Lordship, who further says, “ That there arise many great and  
 “ strong winds some hours before the eclipse  
 “ of the moon ; so that if the moon be  
 “ eclipsed in the middle of the night, the  
 “ winds blow the precedent evening : if the  
 “ moon be eclipsed towards the morning,  
 “ then the winds blow in the middle of the  
 “ precedent night.”

As far as the influence of the sun and moon by attraction is analogous on the sea and atmosphere, I cannot conceive à priori, that much difference can be expected to arise between

tween an eclipse and any common conjunction : for in the last case, the attracting forces act nearly as perpendicular as in the former, and the same inequality of 12,000 miles takes place in the sun's distance from the earth at 6 and 8. If there is such a difference, it must be rather expected to arise from the sudden decrease of light and heat upon the earth at those times : but let us go to experiment.

I have not at present by me, all the accounts of the weather I have kept ; but I will, from such as are at hand, give the following observations in this point of view ; beginning two days before, and ending two days after the eclipse, reduced from astronomical in the Ephemeris, to civil time.

1777.

As I did not this year begin till the 25th of March, there are two eclipses, one of the sun the 9th of January, another of the moon the 23d, omitted.

July

July the 4th at midnight, ☉ eclipsed invisible; but centrally eclipsed, on the meridian, in lat.  $3^{\circ} 48'$  S. long.  $173^{\circ} 30'$  E. of Greenwich.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
July	W	28	S W	Sun, Clouds,	S W	Sun, Clouds,	29,4	59	2,6
3	Th	29	S	Cloudy	S	Cloudy, heavy Rain	29,3	58	2,6
4	F	● 1	S by W	Sun, Clouds, high Winds	S by W	Clouds, Sun, high Winds	29,3	55	2,5
5	S	2	S W	Clouds, Rain	W	Clouds, Sun, Rain	29,4	56	2,65
6	Su	3	N W	Cloudy	N W	Cloudy	29,8	56	2,55

## O B S E R V A T I O N S.

Here it is obvious, that the wind was particularly high at the time of the conjunction, though calm the two preceding and two following days: the glasses stand with little variation.

Observations general.—When there is no wind mentioned in the columns of weather, a calm or very gentle breeze is intended: the different degrees of wind are expressed by



by wind, windy, very windy, or high wind :  
so of rain.

Rain beginning southwardly, occasions the  
wind to veer by the west to the northerly  
points, as in the above example.

By glasses, I mean the three instruments  
used for ascertaining the qualities and state  
of the atmosphere.

July the 20th a eclipsed invisible near  
1 P. M.

Month	Week	Moön	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
July 18	F	15	W	Sun, Clouds,	W	Cloudy	29,7	63	2,25
19	S	16	S W	Cloudy, Wind	S W	Cloudy, Rain	29,6	60	2,2
20	Su	O 17	N	Some Rain, Sun, Clouds	N	Sun, Clouds,	29	63	2,25
21	M	18	N E	Continued small Rain	N E	Some Rain	29	63	2,3
22	T	19	N	Sun, Clouds	E	Cloudy, some Rain	29,1	64	2,3

## O B S E R V A T I O N.

The only wind, not strong, the day be-  
fore opposition.

C

Decem-

December the 29th, ☉ eclipsed, invifible  
near 10 P. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
Dec. 27	S	29	N	Hazy	N	Sun, Clouds,	29,1	40	3,5
28	Su	30	N	Sun	N	Sun	29,5	40	3,5
29	M	● 1	N	Slight Frost, Sun	N	Sun, Clouds,	29,4	36	3,4
30	T	2	N	Slight Frost, Sun	N	Sun, Clouds, Wind	29,3	33	3,3
31	W	3	N	Snow, Sun, Clouds	N	Sun, Clouds,	29,5	35	3,25

## O B S E R V A T I O N.

No wind till the 30th in the afternoon,  
that small, and ceased the next morning.

1778.

June the 24th, ☉ eclipsed, vifible, began  
3<sup>h</sup> 41<sup>m</sup> P. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
June 22	M	28	N W	Sun	N W	Sun	30	70	2,3
23	T	29	N	Cloudy	N	Sun	29,9	70	2,2
24	W	● 1	N E	Sun, Cloudy	N E	Sun, Lightning	29,8	75	2,25
25	Th	2	E	Cloudy	E	Cloudy, Sun	29,8	75	2,25
26	F	3	S W	Sun	W	Sun, Clouds	29,8	82	2,25

O B S E R-

## O B S E R V A T I O N S.

No wind during these five days. On the 27th P. M. much thunder and heavy rain, preceded by an uncommon haziness in the south. Thunder the 28th, but no wind.

December the 4th,  $\epsilon$  eclipsed, visible, began 4<sup>h</sup> 24<sup>m</sup> A. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
Dec. 2	W	14	S E	Sun	S E	Sun, Clouds, small Rain	29,2	42	3,4
3	Th	15	S E	Sun	S E	Cloudy, Rainy	29	42	3,4
4	F	O 16	S E	Rainy	W	Sun, Clouds, Wind	28,5	48	3,6
5	S	17	S	Sun	S W	Sun	28,7	45	3,5
6	Su	18	S W	Sun	S W	Sun	29	42	3,3

## O B S E R V A T I O N.

The only wind, and that gentle, was on the afternoon of the eclipse: the opposition, as above shewn, being in the morning.



December the 18th, ☉ eclipsed, invifible,  
near 10 P. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
Dec. 16	W	28	S W	Cloudy	S W	Cloudy, Clear	29,9	43	3
17	T	29	S W	Sun, Clouds	S W	Cloudy	30	48	3,3
18	F	● 1	S W	Clouds, Sun, Wind	S W	Sun, Cloudy	30	52	3,5
19	S	2	S W	Cloudy, Windy	W N W	Cloudy, Clear	29,9	52	3,7
20	Su	3	S W	Sun	S W	Sun, Clouds	30	46	3,5

### O B S E R V A T I O N S.

Wind on the morning of the conjunc-  
tion, and windy on the morning following.

N. B. On the 31st, at 2  $\frac{1}{2}$  P. M. two days  
before the full moon, an astonishing hur-  
ricane, lasting about five minutes, from the  
west; followed in the night with a conti-  
nued tempest at N. W. ending the next  
morning more northwardly.

1779.

May the 16th, ☉ eclipsed, invisible, near  
1 A. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
May 14	F	29	S W	Sun	S W	Cloudy	29,7	61	2,3
15	S	30	N W	Sun, Clouds	N W W	Sun, Clouds	29,7	61	2,5
16	Su	● 1	S	Rainy, Wind	S	Rain, Hazy, Wind	29,6 5	61	2,75 2,85
17	M	2	S W	Rain, Sun, Wind	S W	Rainy, Wind	29,5	63	3 2,8
18	T	3	S W	Rain, Sun, Windy	S W	Rain, Sun, Windy	29,5	61	2,6

## O B S E R V A T I O N.

The same rains and winds continue some days more.

May the 30th, ☉ totally eclipsed; partly visible; began 3<sup>h</sup> 1<sup>m</sup> A. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
May 28	F	13	N E	Sun	N E	Sun	30	70	2,3
29	S	14	N E	Sun	N E	Sun	30	70	2,3
30	Su	○ 15	N E	Cloudy	N E	Cloudy	30	65	2,3
31	M	16	N E	Sun	N E	Sun	30	68	2,2
June 1	T	17	N E	Sun	N E	Sun	29,9	69	2,1

O B S E R-

## O B S E R V A T I O N S.

The weather remarkably clear, steady, and serene for a week before and after the opposition : cloudy on that day.

From the 1st to the 3d of June, a great difference between day and evening in the Thermometer

Day	Evening
69	52
70	52
70	52

June the 14th, ☉ eclipsed, visible, began 7<sup>h</sup> 18<sup>m</sup> A. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
12	S	28	N	Very rainy	S	Sun, Rain, Thunder	29,3	67	2,4
13	Su	29	S W	Rainy	W	Rainy	29,3	61	2,5
14	M	● 1	W	Cloudy	W	Continued small Rain	29,4	62	2,7
15	T	2	N	Cloudy, Sun	N	Clouds, Sun	29,7	65	2,8
16	W	3	N	Cloudy	N	Cloudy	29,9	61	2,6

## O B S E R V A T I O N.

Calm the whole time.

Novem-



November the 23d, & totally eclipsed ;  
visible ; began 6<sup>h</sup> 8<sup>m</sup> P. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
Nov. 21	Su	14	N	Sleet	N	Cloudy	29,2	41	2,75
22	M	15	N	Sun, Clouds	N	Sun, Clouds	29	44	3,1
23	T	16	N W	Hard Frost, Clouds, Sun	N W	Sun, Clouds, Clear	29	39	2,9
24	W	17	N W	Frost, Hazy	N	Sun	29,15	41	2,75
25	Th	18	N	Snow, Hazy, Thaw	N E	Thaw, Rainy	29	41	2,8

## O B S E R V A T I O N S.

No wind during these five days.

The sky perfectly clear at the time of  
opposition.

The moon totally obscured by the earth's  
shadow above an hour.

Decem-

December the 7th, ☉ eclipsed, invifible,  
near 11 P. M.

Mont <sup>y</sup>	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
Dec. 5	Su	28	W	Slight Frost, Sun, Wind	W	Sun	29,8	45	2,7
6	M	29	W	Frost, Sun	S W	Cloudy	30	42	2,55
7	T	● 1	S W	Cloudy	S W	Rain	29,4	44	2,7
8	W	2	N	Sun	N	Sun, Frost	29,6	46	2,8
9	T	3	S	Very Rainy	S W W	Rainy	29,5	43	2,6

## O B S E R V A T I O N.

Some wind on the morning of the 5th,  
none afterwards.

1780.

May the 4th, ☉ eclipsed, invifible, 55  
minutes past noon.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
May 2	T	29	N	Cloudy	N	Cloudy	29,7	55	3,25
3	W	30	S E	Sun	S E	Sun	30	60	3
4	Th	● 1	S W	Sun	S W	Sun, Cloudy	29,8	60	2,8
5	F	2	S W	Small Rain, Wind	S W	Cloudy, Sun	29,6	60	3
6	S	3	S W	Sun, Clouds, Wind	W	Rain, Sun, Wind	29,6	60	2,8

O B S E R-

# OBSERVATION.

Some wind the two days after the conjunction.

May the 18th  $\alpha$  eclipsed, invifible, at 11<sup>h</sup> A. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
May 16	T	13	W	Sun, Clouds	W	Cloudy	29,85	60	2,55
17	W	14	W	Cloudy	W	Sun	29,85	61	2,75
18	Th	O 15	W	Sun	W	Sun, Cloudy	29,85	62	2,45
19	F	16	W	Windy, Sun, Clouds	W N	Windy, Cloudy, Rain	29,6	60	2,3
20	S	17	S E	Sun	W S E	Sun, Clouds	29,95	60	2,2

# OBSERVATION.

Windy the day after the opposition,

D

Octo-



[ 26 ]

October the 27th, ☉ eclipsed, invisible,  
5<sup>h</sup> 30<sup>m</sup> P. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
Oct. 25	W	28	N W	Sun	N W	Sun	29,55	53	2,7
26	Th	29	N W	Sun	N W	Sun, Clouds	29,8	53	2,6
27	F	● 1	N W	Sun	N W	Sun, Clouds	29,9	53	2,6
28	S	2	N W	Cloudy	N W	Cloudy, Rainy	29,75	53	2,8
29	Su	3	N W	Rainy	N W N	Rainy, Mist	29,6	55	3

### O B S E R V A T I O N.

No wind.

November the 12th, ☾ eclipsed, visible,  
began 3<sup>h</sup> 6<sup>m</sup> $\frac{1}{2}$  A. M.

Month	Week	Moon	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
Nov. 10	F	15	W	Cloudy	W	Cloudy	29,8	45	2,6
11	S	16	S W	Hazy	S W	Hazy	29,9	52	3,2
12	Su	○ 17	W	Hazy, Sun	S W	Hazy, Sun	29,8	50	3,2
13	M	18	W	Very Windy, Rain	W	Sun, Cloudy, Windy	29,35	53	3,3
14	T	19	W	Sun, Wind	W	Sun, Wind, small Rain	29,5	50	2,9

### O B S E R V A T I O N.

High wind the forenoon of the day after op-  
position; and wind continued two days more.

# ABSTRACT State of the ECLIPSES

1777, July 4, ☉ eclipsed,	High wind on that day only.
20, ☾	Some wind on the day before.
Dec. 29, ☉	No wind till the 30th P. M.
1778, June 24, ☉	No wind.
Dec. 4, ☾	Some wind on that day only.
18, ☉	Wind on that, and windy the next day.
1779, May 16, ☉	Wind continued from that day near a week.
30, ☾	No wind.
June 14, ☉	No wind.
Nov. 23, ☾	No wind.
Dec. 7, ☉	Some wind two days before; none then nor afterwards.
1780, May 4, ☉	Some wind the two following days.
18, ☾	Windy the day after.
Oct. 27, ☉	No wind.
Nov. 12, ☾	High wind the day after, then windy.
1781, Apr. 23, ☉	Windy long before, and some days after *.
Oct. 17, ☉	No wind till some days after *.

## SUMMARY OBSERVATIONS.

Out of seventeen successive Eclipses.

Two instances of high winds pointedly at the time.

Six of no wind in the course of the five given days.

Nine of more or less doubtful determination.

\* See the Calendar.

Thus, having complied with his Lordship's injunctions, I leave Gentlemen to draw what conclusion they please: aiming at truth, it cannot but be indifferent to me on which side it lies. I began these observations without prevention, and conclude without presumption. If I was to give my opinion, I would say, that there does not appear to me here in the case of winds more certainty at eclipses, than in the case of weather at common lunations.

If Navigators should think this matter worthy attention, they might easily find whether our situation is the cause of this uncertainty. And if a correspondence for a few years was kept up on observations made on the coasts of the Mediterranean, it would appear how far the antients founded their conclusions on experiment.

Before I dismiss the subject, it may be right to observe, that the Thermometer I make use of is on Farenheit's construction by Nairne; and that I have contented myself to take it in general, in a room in the morning before the lighting of fires: but when there appeared a tendency to great cold or heat, or any sudden change, I then  
always



always had recourse to a proper northern aspect without doors.

The Hygrometer is of my own construction, taken from a model given me some years ago, by the ingenious Mr. Major, of St. Martin's-Lane; the use and simplicity of which I beg leave to recommend.

It consists of a piece of deal, clear of knots, about one inch and a quarter square, and two feet long, cut transversely, or across the grain, the more freely to imbibe the moisture of the air. To prevent the wood from warping, it is cut into three parts, placed perpendicularly against a wall or wainscot, and resting on each other in tin sockets at the divisions, with room to play. The bottom of the lower piece is placed on a pedestal, and in the top of the uppermost is fixed a peg with a round head, which presses one end of a lever in shape of an S, and causes the other end to bear against an index of sufficient length, (suppose a foot) to occasion its falling downwards by its own weight, at the further extremity, on less degree of pressure on the end nearest the lever; which infallibly takes place when the state of the atmosphere is varying from  
a greater

a greater to a lesser degree of moisture. The end of the index sweeps an arch graduated 1, 2, 3, 4, inches, with subdivisions. The highest numbers indicate rain; the lowest fair weather.

On the subject at large, I have only to say, that as my observations lead to caution us, at least in this island, not to depend on the conjunctions of the moon, or any particular days of her increase or wane, for predictions of the weather, those, who from occupation or curiosity are interested in the inquiry, need not be from hence discouraged.

Providence exerts itself in uniform and steady laws; and has given a capacity to man to discover them, as far as is necessary for his well-being and preservation; and nothing can elevate his ideas more, or enlarge his conception of the goodness and wisdom of the Creator of the world, than a sincere and sober investigation of them.

In the atmosphere, where the effect is produced, we must search for the only sure prognostics of the weather. The invention of man has of late years so admirably succeeded in the construction of simple, and therefore perfect instruments, to discover its qualities,

qualities, that its comparative lightness and heaviness, heat and cold, dryness, and moisture, are at every moment accurately determined ; and on these the sought-for changes depend. If to these helps we had the shepherd's and seaman's experience, all the certainty will be obtained, that the nature of the thing will admit ; sufficient to avoid many inconveniencies and dangers, in which a total ignorance, or want of foresight, might involve us.



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Moon's Age	Wind	Weather A M	Wind	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter	Rain
	A M		P M					
8	S W	Mist, Wind	S W	Sun, Clouds, Wind	29,4	49	3,2	
9	W	Sun, Wind, Frost	W	Sun, Wind, Frost	29,4	46	2,9	
10	N W	Frost, Sun, Wind	N W	Sun, Wind, Frost	29,6	45	2,75	
11	N	Frost, Sun	N	Frost, Sun	29,7	45	2,6	
12	N	Cloudy, Calm, Thaw	N	Cloudy, Calm	29,95	46	2,5	
13	N	Calm, Cloudy	N S	Calm, Cloudy	29,95	44	2,65	
14	S W	Cloudy	S W	Cloudy, a Shower	29,95	46	2,9	
15	N	Wind, Sun	N	Sun, Frosty	30,15	44	3	
16	N	Sun	N	Sun	30,35	45	2,7	
17	N E	Cloudy, Frost, Wind	N E	Cloudy, Frost, Wind	30,35	40	2,45	
18	E	Cloudy, Frost, Wind	E	Cloudy, Wind	30,2	40	2,3	
19	E	Cloudy, Frost	E	Cloudy, Frost	30	40	2,3	
20	E	Cloudy, Frost	E	Cloudy	30	33	2,6	
21	E	Cloudy, Frost	E	Cloudy	29,8	39	2,6	
22	N E	Clouds, Sun, Frost	N E	Sun, Clouds	29,8	33	2,7	
23	N E	Cloudy, Frost	N E	Cloudy	29,7	38	2,7	
24	N E	Hazy	E	Rain	29,6	41	2,6	
25	S E	Hazy	S E	Hazy, Rainy, Wind	29,4	43	2,8	
26	N	Frost, Sun	N	Frost, Cloudy	29,6	46	2,85	0,5
27	S	Clouds, Wind	S	Cloudy, Wind	29,7	43	2,6	
28	N	Rainy, Windy	N E	Sleet	29,3	47	2,8	0,5
29	N E	Frost, Clouds, Wind	N E	Wind, Clouds, Stars, hard Frost	29,5	43	2,5	
30	N E	Hard Frost and Snow	N E	Much Snow	29,3	32	2,3	
1	S	Thaw and Rain	S	Rain, Thaw	29,8	44	2,5	
2	N W	Much Snow with high Wind, Sun	N W	Very hard Frost	29,1	41	2,6	
3	N W	Thaw	N W	Thaw	29	40	2,55	
4	N	Hard Frost, Sun	S E	Sun, Cloudy	29,9	38	2,4	
5	S W	Thaw, Windy	S W	Thaw, Windy	29,6	51	3	In.
6	S W	High Wind, Cloudy	S W	Rainy, Windy	29,55	51	3,5	
7	S W	High Wind, Clouds, Sun	W	Windy, Sun, Clouds	29,5	52	3,25	
8	W	Sun	W	Sun, Cloudy	29,8	47	3	0,4



Month	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter	Month	Week
Feb. 1	T	D 9	S W	Rain	S W	Sun, Wind, Clouds	29,7	47	2,8	Mar. 1	T
2	F	10	S W	Cloudy	S W	Cloudy	29,85	50	2,8	2	F
3	S	11	S W	Cloudy	S W	Cloudy	30	50	2,95	3	S
4	Su	12	W	Cloudy	S W	Sun, Clouds	29,8	50	2,9	4	Su
5	M	13	S W	Cloudy, Sun	S W	Cloudy	29,5	50	3	5	M
6	T	14	S W	Sun	S W	Cloudy	29,6	52	3,1	6	T
7	W	15	S W	Sun	S W	Sun	29,7	50	3	7	W
8	T	O 16	S E	Misling Rain	S	Sun, Rain	29,45	48	2,9	8	T
9	F	17	S W	Sun, Wind	S W	Clouds, Sun, Wind	29,3	50	3	9	F
10	S	18	S W	Sun, Wind	S W	Sun, Clouds, Wind	29,5	48	2,9	10	S
11	Su	19	S W	Cloudy, Sun, Windy	S W	Cloudy, Sun, very Windy, Rain	29,5	50	2,9	11	Su
12	M	20	S W	Windy, Sun, Clouds	S W	Cloudy, Windy, Storm	29,3	48	2,85	12	M
13	T	21	S W	High Wind, Rain, Sun	W S W	Cloudy, Windy, Ligh- ning, Thunder, Rain	28,8	50	3,1	13	T
14	W	22	S	Much Rain	S W	Sun, Wind	29,1	50	2,8	14	W
15	T	C 23	W	Rainy	W	Wind, Sun, Clouds	29,3	50	2,7	15	T
16	F	24	N W	Sun, Clouds, Wind	N W	Sun, Clouds, Wind	29,7	47	2,65	16	F
17	S	25	W	Frost, Cloudy, Sun, Wind	W	Hail, Sun, Clouds, Wind	29,8	45	2,45	17	S
18	Su	26	W	Hard Frost, Hazy, Sun	W	Hazy, Sun	29,8	43	2,45	18	Su
19	M	27	N W	Sun, Windy, Clouds	N W	Sun, Cloudy, Windy	29,6	45	2,6	19	M
20	T	28	N E	Sun, Clouds, Wind	N	Cloudy, Wind	30	45	2,5	20	T
21	W	29	N	Snowy	N	Snow	29,9	43	2,5	21	W
22	T	30	N	Sun, Wind	N	Sun, Wind	29,9	40	2,5	22	T
23	F	● 1	W	Rain	N W	Sun, Rain	29,65	45	2,7	23	F
24	S	2	W	Rain	W	Sun, Cloudy	29,4	47	2,8	24	S
25	Su	3	N W	Windy, Clouds, Sun	N W	Sun, Cloudy, Windy	28,95	51	2,9	25	Su
26	M	4	W	Small Rain	N W	Sun, Clouds, Wind	28,9	45	2,6	26	M
27	T	5	S	Sun, Rainy, Calm	W N	Rainy, high Blasts and Storms	28,95 28,7,6	45	5 2,6	27	T
28	W	6	N W	Sun, Windy	N	Cloudy, Windy, Sun, Frosty	29,7	46	2,6	28	W



Month	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter	Rain
Mar. 1	T	7	W	Cloudy, some Rain	W	Sun, Clouds, Wind	29,8	45	2,5	
2	F	8	S W	Hazy	S W	Sun, Clouds	30	49	2,8	
3	S	9	S W	Cloudy, Wind	S W	Cloudy	30	53	3	
4	Su	10	S W	Cloudy, Wind	S W	Cloudy, Wind	29,9	52	2,9	
5	M	11	N W	Rain, Sun	N W	Sun, Clouds, Wind	29,9	52	2,8	
6	T	12	W	Sun, Wind	W	Sun, Wind	30,05	50	2,65	
7	W	13	W	Clouds, Sun, Wind	W	Sun, Wind	30	52	2,65	
8	T	14	W	Clouds, Sun	W	Sun, Cloudy	29,9	52	2,6	
9	F	15	S W	Sun	S W	Cloudy	29,9	52	2,6	
10	S	16	S W	Cloudy	S W	Cloudy	29,9	52	2,7	
11	Su	17	N W	Sun	N	Sun	29,95	50	2,5	
12	M	18	N E	Hazy, Fog	N E	Sun, Cloudy	30	45	2,3	
13	T	19	E	Cloudy	E	Sun	30,05	50	2,3	
14	W	20	N E	Fog	N E	Sun	30,1	47	2,3	
15	T	21	N E	Fog, Sun	N E	Sun	30,2	47	2,3	
16	F	22	N E	Fog	N E	Sun	30,1	47	2,3	
17	S	23	N E	Fog	N E	Sun	30	48	2,25	
18	Su	24	N E	Fog, Sun	N E	Sun	29,9	49	2,3	
19	M	25	N W	Sun	N W W	Sun	29,9	52	2,3	
20	T	26	S	Cloudy, Sun	S W	Sun	29,95	53	2,3	
21	W	27	S W	Sun, Clouds, Wind	S W	Cloudy, Wind	29,9	54	2,4	
22	T	28	W	Sun, Clouds, Wind	W	Clouds	29,9	53	2,5	
23	F	29	N W	Sun	N W	Sun	30,1	53	2,25	
24	S	1	W	Sun, Clouds	W	Sun, Clouds	30,15 2	53	2,2	
25	Su	2	S W	Sun, Wind	S W	Sun	30	55	2,2	
26	M	3	N	Sun, Clouds, Windy	N	Sun, Clouds, Windy	29,8	50	2,1	
27	T	4	N	Sun, Windy, Clouds, Sleet	N	Sun, Windy, Clouds, Sleet	29,75 7	48	2,1	
28	W	5	N	Sun, Wind, Clouds	N E	Sun, Clouds, Wind	29,7	46	2,1	
29	T	6	N E	Frost, Wind, Cloudy	N E	Wind, Clouds	29,7	44 40 33	2	
30	F	7	N E	Frost, Sun, Clouds, Wind	N E	Sun, Wind, Clouds	29,75	45	2	
31	S	8	N E	Cloudy, Windy	N E	Cloudy, Frost	29,9	45	2	

Month	Week	Moan's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter	Day	Week
Apr. 1	Su	D 9	E	Sun, Clouds, Wind	E	Sun, Clouds	29,55	45	2,1	1	1
2	M	10	N	Sun	N	Sun	29,56	46	2,15	2	2
3	T	11	N E	Sun	N E	Sun	29,7	47	2,1	3	3
4	W	12	E	Cloudy	E	Cloudy	29,5	46	2,1	4	4
5	T	13	E	Cloudy	E	Sun, Clouds, Rain	29,15	47	2,1	5	5
6	F	14	S W	Sun	S W	Clouds, Sun	29,1	50	2,2	6	6
7	S	15	S	Sun, Cloudy, Wind, Rain	S	Rainy, Wind	29,25	50	2,2	7	7
8	Su	O 16	S W	Windy, Sun	S W	Windy, Sun, Cloudy	29,35	51	2,4	8	8
9	M	17	S W	Cloudy, Windy, small Rain	S W	Cloudy, Wind, small Rain	29,5	57 60	2,85	9	9
10	T	18	S W	Rain, Sun, Windy	S W	Sun	29,5	57	3	10	10
11	W	19	S W	Sun, Cloudy	S	Rainy	29,25	57	2,7	11	11
12	T	20	W S	Rainy, Windy	N W N	Very Rainy, Frost	29,3	56	2,7	12	12
13	F	21	N W	Sun	N W	Sun, Clouds	29,7	52	2,25	13	13
14	S	22	N W	Sun, Wind, Clouds	N W	Clouds	29,5	52	2,25	14	14
15	Su	C 23	N W	Sun, Cloudy, Wind	N W	Cloudy	29,5	52	2,45	15	15
16	M	24	W	Sun, Windy	W	Sun, Clouds	29,6	54	2,3	16	16
17	T	25	E	Sun	S E	Sun	29,65	64	2,3	17	17
18	W	26	E	Sun, Wind	E	Sun, Wind	29,6	66	2,25	18	18
19	T	27	S W	Sun, Windy, Clouds	S W	Cloudy, Wind, Rain	29,65	65	2,3	19	19
20	F	28	S W	Cloudy, Wind	S W	Sun, Clouds	29,85	63	2,4	20	20
21	S	29	S W	Cloudy, Wind	S W	Cloudy, Wind	29,8	60	2,6	21	21
22	Su	30	S W	Sun, Clouds, Wind	S W	Cloudy, Wind, Sun	29,75	60	2,4	22	22
23	M	Eclipse 1 6. 37. P M	W	Sun, Clouds, Windy	W	Cloudy	29,8	60	2,3	23	23
24	T	2	N W	Cloudy, Wind	N W	Sun, Clouds,	29,9	60	2,3	24	24
25	W	3	N W	Sun, Clouds	N W	Cloudy	30	60 54	2,3	25	25
26	T	4	N	Cloudy, Wind	N	Clouds, Sun, Rain	30,05	54	2,4	26	26
27	F	5	N	Very Cloudy	N	Very Cloudy	30	52	2,4	27	27
28	S	6	N	Sun	N	Sun	29,8	55	2,4	28	28
29	Su	7	N	Sun, Wind	N	Sun, Wind	29,7	57	2,3	29	29
30	M	8	N	Sun	N	Sun, Clouds	29,7	56	2,3	30	30



Barom- eter	Thermo- meter	Hygrome- ter	Rain	Barom- eter	Weather P M	Wind P M	Weather A M	Wind A M	Moon's Age	Week
29,7	56	2,3		29,7	Sun	N	Sun	N	D 9	T
29,7	58	2,3		29,7	Sun, Cloudy	W	Sun, Cloudy	N S	10	W
29,75	62	2,3		29,75	Cloudy, Sun, Rain	S	Sun, Hazy	S	11	T
29,75	50	2,3		29,75	Cloudy, Windy	N	Cloudy, Wind, Frost	N	12	F
29,75	50	2,3		29,75	Showers, Sun, Cloudy	N	Clouds, Sun	N	13	S
29,9	50 52	2,15		29,9	Cloudy	N	Cloudy	N	14	Su
29,9	50 48	2,3		29,9	Cloudy, Frost	N E	Cloudy	N E	15	M
29,7	46	2,25		29,7	Cloudy, Frost	N E	Sun, Cloudy	N E	16	T
29,5	45	2,2		29,5	Sun, Clouds	N E	Sun, Frost	N E	17	W
29,5 4	45	2,2		29,5 4	Sun, Wind, Hazy	N E	Sun, Frost	N E	18	T
29,45	60	2,25		29,45	Calm, Sun, Hazy	N E	Hazy, small Shower	N E	19	F
29,7	62	2,5		29,7	Sun, Rain	S	Wind, Sun	S	20	S
29,6	67	2,5		29,6	Sun, Rain	S E	Sun, Clouds	S W	21	Su
29,65	66	2,7		29,65	Sun, Cloudy	N E	Rain, Sun	N E	22	M
29,7	66	2,6		29,7	Cloudy, Sun, Rainy	N E	Cloudy	N E	23	T
29,7	60	2,6		29,7	Small Rain	N E	Small Rain	N E	24	W
29,8	60	2,5		29,8	Hazy, Mifty, Rain	N E	Hazy	N E	25	T
29,7	60	2,5 8		29,7	Cloudy	W	Rainy	E	26	F
29,65	61	2,85 9		29,65	Cloudy, Sun, Cloudy	E	Cloudy	E	27	S
29,65	64	2,9		29,65	Sun, Rain, Sun	S W W	Rain, Cloudy	S S W	28	Su
29,8	66 51	2,6		29,8	Sun, Clouds, Hazy, Wind	S W W N E	Sun	S W	29	M
30	46	2,5		30	Sun, Hazy, Wind	N E	Sun, Clouds, Wind	N E	30	T
30,1	46	2,2		30,1	Sun, Cloudy, Wind	N E	Sun, Windy	N E	1	W
30,1	46	2,15		30,1	Sun	N E	Sun, Wind	N E	2	T
29,95	48	2		29,95	Sun	N E	Sun	N E	3	F
29,85	63	1,8		29,85	Sun	E	Sun	E	4	S
29,9	65	1,9		29,9	Sun	E	Sun	E	5	Su
29,9	68	1,95		29,9	Sun	E	Sun	E	6	M
29,9	72	1,9		29,9	Sun	E	Sun	E	7	T
29,75	76 80	1,85		29,75	Sun, Mifty, Clouds	E	Sun	E	8	W
29,75	78	1,8		29,75	Sun	E	Sun	E	9	T







Month	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter	Week
June										
1	F	10	E	Sun	S W	Sun	29,75	80	1,75	Su
2	S	11	E	Sun	E S W	Sun, Clouds, Thunder, small Rain	29,7	81	1,8	M
3	Su	12	S W E	Small Rain, Thunder, Sun	S W	Thunder, Sun, small Rain	29,55	71	1,9	T
4	M	13	N W	Heavy Shower, much Rain	N W	Rain	29,5	71	2	W
5	T	14	S W	Cloudy	S W	Cloudy, Rain	29,5	70	2	T
6	W	O 15	S W	Rainy, Sun	S W	Sun, Clouds	29,35	72	2,1	F
7	T	16	N	Sun, Clouds, Wind	N	Cloudy, Windy, Rain	29,35	60	2,1	S
8	F	17	S W S S E	Sun, Rainy	S E	Cloudy, Mist, Wind, Rainy	29,34	60 58	2,15	Su
9	S	18	S E E	Sun, Cloudy, Hazy	E	Hazy, Rain, Wind	29,45	60 58	2,2	M
10	Su	19	E	Rainy, Clouds	S E	Much Thunder and Lightning, with Rain	29,45	62	2,3	T
11	M	20	S E	Sun	S E	Sun, Thunder, small Rain	29,55	64	2,4	W
12	T	21	N E	Very Rainy	N E	Thunder, Sun, Clouds, Wind	29,55	65	2,6	T
13	W	C 22	E	Cloudy	S E	Sun, some Clouds, Wind	29,5	72	2,7	F
14	T	23	S E	Cloudy, Wind	S	Cloudy, Wind	29,5	67	2,7	S
15	F	24	S	Sun, Clouds, Wind	S	Cloudy	29,5	67	2,7	S
16	S	25	S	Sun, Clouds, Wind, small Rain	S W	Sun, Clouds,	29,5	70	2,5	S
17	Su	26	S W	Sun, Clouds, Wind	S W	Sun, Clouds	29,5	70	2,3	S
18	M	27	S	Rain, Clouds, Sun	S	Sun, Clouds	29,6	70	2,3	S
19	T	28	S E	Sun, Cloudy	S E	Sun, Thunder, Lightning, Rainy	29,6	76	2,4	S
20	W	29	N E	Sun, Wind	E	Sun, Wind, Hazy	29,6	81,5	2,8	S
21	T	I	E	Sun, Wind	E	Sun, Wind, Cloudy	29,6	56	2,5	S
22	F	2	N E	Hazy, Windy	N E	Hazy, Wind	29,6	64	2,4	S
23	S	3	N E	Hazy, Wind	N E	Hazy, Sun, Hazy	29,6	65	2,2	S
24	Su	4	N E	Cloudy	N E	Hazy	29,6	65	2,2	S
25	M	5	N E	Cloudy	N E	Hazy	29,6	65	2,2	S
26	T	6	N E	Clouds, Sun, Wind	N E	Clouds, Sun	29,6	65	2,2	S
27	W	7	N E	Sun, Wind	N E	Sun, Clouds	29,75	70	2,2	S
28	T	D 8	W	Sun, Clouds, Wind	W	Sun, Clouds	30	70	2,2	S
29	F	9	W	Sun, Wind	W	Sun	30	72	2,2	S
30	S	10	S W	Sun, Wind	S W	Sun	30	78	2,2	S





Hygrom- eter	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrom- eter	Rain
1,75	Su	11	S	Sun, Cloudy	S	Sun, Hazy	29,7	81	2,15	
1,8	M	12	S S W	Sun, Clouds, Windy	S W	Cloudy, Windy	29,5	79 75	2,15 2,2	
1,9	T	13	S W	Sun, Clouds, very Windy	S W	Sun, Clouds	29,5	70	2,1	
2	W	14	S W	Sun, Clouds, Wind	S W	Sun, Clouds, Wind	29,7	72	2	
2	T	O 15	S W	Sun, Clouds	S W	Sun, Clouds	29,9	73	1,8	
2,1	F	16	S E	Sun, Clouds, Wind	S E	Sun, Clouds, Wind, Rain	29,65	73	1,7	
2,1	S	17	S	Sun, Clouds, Windy	S	Sun, Shower, Wind	29,5	70	1,9	
2,15	Su	18	S	Sun, heavy Showers	S W W	Sun, heavy Showers	29,5	68	2,1	0,7
2,2	M	19	W	Rain, Sun, Windy	N W	Shower, Sun, Wind	29,7	66	2,2	0,2
2,3	T	20	N W	Rain, Sun, Wind	N W	Sun, Clouds	29,65	66	2,3	0,2
2,4	W	21	W	Cloudy, Wind	W	Sun, Clouds	29,65	68	2,5	
2,6	T	22	S W	Sun, Windy	S W	Sun, Windy	29,7	70	2,5	
2,7	F	23	S W	Windy, Cloudy	S W	Windy, Cloudy, Rain	29,8	68	2,6	
2,7	S	24	S W	Rainy	W	Cloudy, Sun	29,75	70	2,6	0,5
2,7	Su	25	W	Sun, Clouds, Windy	W	Sun, Clouds, Wind	29,85	68	2,3	
2,5	M	26	W	Sun, Clouds	W	Sun, Clouds	30	68	2,2	
2,3	T	27	N	Sun, Clouds	N	Sun, Clouds	30	70	2,15	
2,3	W	28	N	Sun	N	Sun, Clouds	30	75	2,2	
2,4	T	29	N	Cloudy	N	Sun, Clouds	30,1	70	2,2	
2,8	F	30	N	Cloudy	N	Sun, Clouds	30,15	72	2,2	
2,5	S	● 1	N	Sun, Clouds	N	Sun	30,15	73	2,15	
2,4	Su	2	N	Sun, Clouds	N	Sun, Clouds	30	74	2,2	
2,2	M	3	N	Sun	N	Sun, Clouds	30	76	2,15	
2,2	T	4	S W	Sun, Clouds	S W	Sun, Cloudy	29,7	80	2 1,8	
2,2	W	5	W	Sun, Clouds, Wind	W	Rain	29,65	75	2	
2,2	T	6	N W	Sun, Clouds, Wind	N W	Sun, Cloudy	29,65	70	1,9	
2,2	F	7	N W	Sun, Clouds, Wind	W	Sun, Clouds	29,7	67	2	
2,2	S	D 8	S W	Cloudy, Wind	W	Cloudy	29,7	69	2	
2,2	Su	9	S W	Sun, Clouds	W	Sun	29,7	75	2,3	
2,2	M	10	S W	Cloudy	S W	Sun, Clouds	29,8	75	2,25	
2,2	T	11	S S W	Sun	S W N	Sun	29,7	79	2,25	
2,2										1,6



Month	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hyg-me- ter
Aug. 1	W	12	N	Cloudy, Sun, Wind	N W	Sun, Clouds	29,75	75	2,1
2	T	13	N W	Sun, Clouds, Wind	N W	Sun, Clouds, Wind	29,8	74	1,9
3	F	14	N W	Sun, Clouds	N W	Sun	29,9	75	1,9
4	S	15	E	Sun	E	Sun	30,05	72	1,8
5	Su	16	E	Sun	N E	Sun, Clouds, Wind	30,1	72	1,8
6	M	17	N E	Showers, Clouds, Sun	N E	Clouds, Sun	29,8	76	2,9
7	T	18	N E	Sun	N E	Sun, Clouds	29,8	76	2,9
8	W	19	N	Much Rain	N	Sun, Clouds	29,7	73	2,1
9	T	20	S W	Sun, Clouds	S W	Sun, Clouds, Wind	29,7	78	2,2
10	F	21	S W	Sun, Clouds, Wind	S W	Sun, Clouds	29,7	78	2,2
11	S	22	S	Sun	S	Sun, Clouds, Thunder, Lightning	29,8	80	2,2
12	Su	23	S	Sun, Clouds, Wind,	S	Sun, Cloudy	29,7	82	2,2
13	M	24	S W	Sun, Clouds, Wind	S W	Sun, Shower, Sun, Wind	29,65	78	2,1
14	T	25	S W	Sun, Clouds, Wind	S W	Sun, Clouds	29,6	73	1,9
15	W	26	S	Sun, Wind, Rainy	S W	Sun, Windy	29,3	68	1,8
16	T	27	S W	Sun, Clouds, Windy	S W	Sun, Clouds, Wind	29,3	68 58	1,8
17	F	28	W	Sun, Clouds, Wind	W	Sun, Wind	29,5	78 58	1,8
18	S	29	S W	Sun, Clouds	S W E	Sun, Clouds	29,6	78 58	1,8
19	Su	1	N	Hazy, small Rain	N	Small Rain, Sun, Clouds	29,5	65	2,1
20	M	2	N	Sun, small Rain	N	Cloudy, Wind	29,55	65	2,1
21	T	3	N	Sun, Clouds, Wind	N	Sun	29,9	67	2 1,9
22	W	4	S W	Sun, Clouds	S W	Very Hazy, small Rain	29,8	78	2,2
23	T	5	S W	Sun, Clouds	S W	Sun, Clouds	29,6	75	2,1
24	F	6	S	Sun, Clouds	S	Sun, heavy Shower	29,4	78	2
25	S	7	W	Sun, Clouds, Windy	W	Sun, Clouds	29,3	75	2
26	Su	8	S W	Cloudy	S W	Some missing Rain	29,6	76	2,1
27	M	9	S W	Sun, Clouds, Wind	S W	Sun, Cloudy, Wind	29,45	78	2,2
28	T	10	S W	Sun, Clouds, Shower, Windy	S W	Sun, Clouds, Showers, Wind	29,3	70	2,3
29	W	11	S W	Sun, Clouds, Wind	S W	Sun, Clouds, Wind	29,5	70	2,2
30	T	12	S	Sun, Cloudy	S	Cloudy, Thunder and Rain	29,7	70	2,2
31	F	13	S W	Sun, Windy	S W	Sun, Windy	29,55	75	2



Thermo- meter	Hygrome- ter	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter	Rain
75	2,1	S	14	SW	Sun, Clouds	SW	Sun	29,75	73	1,9	
74	1,9	Su	 15	N	Mifling, then a heavy Rain	NE	Hazy, Rain	29,7	66	2,1	0,4
75	1,9	M	16	SW	Sun, Clouds	SW	Sun, Clouds	29,65	72	2,3	
72	1,8	T	17	SW	Cloudy	SW	Sun, Cloudy	29,6	72	2,3	
72	1,8	W	18	N	Rainy, Windy	NW	Much Rain, Wind	29,3	65	2,3	1,1
76	2,9	T	19	W	Rain	W	Sun, Clouds, Wind	29,5	65	2,25	
76	2,9	F	20	SW	Sun	SW	Sun	29,65	65	2,1	
73	2,1	S	21	S	Cloudy	S	Cloudy	29,9	73	2,25 2,5	
78	2,2	Su	22	S	Sun, Clouds	SN	Sun, Clouds	30	78	2,75	
78	2,2	M	 23	N	Sun, Wind	N	Sun, Hazy	30	78	2,25	
80	2,2	T	24	N	Hazy, Wind	N	Hazy	30	68	2,25	
82	2,2	W	25	N	Cloudy	N	Cloudy	30	68	2,3 0,5	
78	2,1	T	26	N	Rainy	N	Cloudy, Sun	29,8	69	2,7	0,5
73	1,9	F	27	N	Sun, Clouds	N	Sun, Clouds	29,8	68	2,6	
68	1,85	S	28	E	Sun, Clouds	SE	Sun, Lightning, Showers	29,7	67	2,5	
68	1,85	Su	29	S	Sun, Cloudy	S	Heavy Showers	29,2	67	2,8	0,5
78	1,85	M	 1	W	Sun, Clouds	W	Sun, Clouds	29,3	65	2,5	
78	1,85	T	2	N	Sun, Cloudy	N	Windy, Rain	29,7	62	2,3	
65	2,1	W	3	SW	Sun	SW	Sun, Cloudy	29,7	63	2,3	
65	2,1	T	4	NW	Sun, Clouds	NW	Sun, Shower	29,7	65	2,5	
67	2,1	F	5	NW	Windy, Sun	NW	Wind, Sun, Shower	29,5	62	2,3	
78	2,25	S	6	SW S	Sun, Cloudy	W	Cloudy	29,5	60	2,3	
75	2,1	Su	7	NW	Sun, Clouds, Windy	NW	Sun, Clouds, high Wind	29,25	51	2,3	
78	2	M	 8	N	Sun, Showers, Windy	N	Sun, Clouds, Windy, Hail	29,3	51	2,2	
75	2	T	9	N	Sun, Clouds, Windy	N	Sun, Cloudy, Windy	29,3	50 48	2,2	
76	2,1	W	10	NW	Cloudy, Windy	NW	Sun, Cloudy, Wind, Showers	29,4	50	2,15	
78	2,2	T	11	NW	Cloudy, Windy	NW	Cloudy, Windy	29,45	50	2,25	
70	2,3	F	12	NW	Sun, Clouds, Wind	NW	Cloudy, Windy	29,6	50	2,25	
70	2,25	S	13	W	Cloudy, Wind	SW	Cloudy	29,85	60	2,25	
70	2,2	Su	14	SW	Rainy	SW	Cloudy	29,8	60	2,5	0,2
5	2										2,7

Month	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Baro- meter	Thermo- meter	Hygrome- ter	Week
Oct.										
1	M	15	N W	Cloudy	W	Cloudy	29,85	70	3,5	T
2	T	 16	W	Sun, Clouds, Windy	W	Sun, Clouds	29,9	65	3,25	F
3	W	17	N	Cloudy	N	Cloudy	29,9	60	2,75	S
4	T	18	N W	Sun	N W	Sun	29,9	60	2,5	Su
5	F	19	N W	Cloudy, Sun	N W	Sun	29,9	60	2,5	M
6	S	20	N W	Cloudy, Sun	N W	Sun	29,9	58	2,3	T
7	Su	21	N W	Sun	N W	Sun, Clouds	30,1	58	2,5	W
8	M	22	N W	Cloudy	N W	Cloudy	30,15	63	2,3	T
9	T	23	N W	Clouds, Sun	N W E	Sun, Clouds	30,2	60	2,5	F
10	W	 24	W	Cloudy	N W	Cloudy	30	57	2,3	S
11	T	25	S W	Sun	S W	Sun, Clouds	30	60	2,7	S
12	F	26	S W	Cloudy	S W	Cloudy	29,8	60	2,8	M
13	S	27	W	Sun	W	Sun, Clouds	29,85	62	2,7	T
14	Su	28	W	Cloudy	W	Cloudy	29,95 30	63	2,75	W
15	M	29	N W	Sun, Cloudy	N W	Clouds, Sun	30	60	2,5	T
16	T	30	N	Sun	N	Sun	30	60	2,2	F
17	W	 Eclipse 1 6. 53. A M	N	Sun, Clouds	N	Sun, Clouds	30	58	2,2	S
18	T	2	N W	Cloudy	N W	Cloudy	30	57	2,2	M
19	F	3	N	Sun, Clouds, Windy	N	Sun, Clouds	29,9	55	2,3	T
20	S	4	N	Sun, Clouds, Wind	N	Sun, Clouds, Windy	29,75	55	2,3	F
21	Su	5	N W	Sun, high Wind	N W	Sun, high Wind	29,75	55	2,4	S
22	M	6	N	Sun, Wind	N	Sun, Wind	30	52	2,3	M
23	T	7	N	Frost, Sun, Wind	N	Sun	30	40	2,1 1,9	T
24	W	 8	N W	Misting Rain	W	Cloudy	29,9	55	2	F
25	T	9	N	Sun, Clouds	N	Cloudy, Wind	29,8	55	2,15	S
26	F	10	N	Sun, Clouds	N	Sun, Clouds	30,1	56	2,3	M
27	S	11	N	Sun, Cloudy	N	Cloudy, Misting	30	57	2,35	T
28	Su	12	S W	Sun, Clouds	S W	Sun, Clouds	29,5	57	2,5	F
29	M	13	N	Sun, Clouds	N	Small Rain, Clouds	29,4	55	2,3	S
30	T	14	N	Cloudy, small Rain	N	Cloudy	29,2	50	2,3	M
31	W	15	N W	Sun, Clouds	W	Sun, Clouds	29,45	45	2,3	T



meter	Hygrometer	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barometer	Thermometer	Hygrometer	Rain
0	3,5	T	16	SW	Sun, Clouds	SW	Sun, Cloudy, Windy	29,5	47	2,3	
5	3,25	F	17	SW	Rainy	W	Rain	29,3	51	2,7	0,75
0	2,75	S	18	NW	Sun	NW	Sun	29,5	50	2,5	
0	2,5	Su	19	N	Frost, Sun	N	Sun	29,75	40	2,3	
0	2,5	M	20	S	Rainy	S	Hazy	29,3	57	2,55	
2,3		T	21	S	Rain	SW	Small Rain	29,15	57	3	
2,5		W	22	SW	Rainy, Windy	NW	Windy	29,1	52	2,9	0,75
2,3		T	23	W	Sun, Windy	NW	Sun, Windy	29,8	48	2,5	
2,5		F	24	NW	Frost, Sun	NW	Sun, Clouds	29,95	47	2,5	
2,3		S	25	S	Small Rain, Hazy	S	Hazy, Rainy	29,7	60	2,8	
2,7		Su	26	W	Rain, Hazy	NW	Rainy	29,3	58	3,3	0,75
2,8		M	27	W	Cloudy	W	Sun, Clouds	29,4	48 52	3,1	
2,7		T	28	W	Sun	W	Sun, Rainy	29,3	52	3 2,7	
2,75		W	29	S	Rainy	SW	Sun, Wind, Clouds, Rain	29	58	3,4	1
2,5		T	1	W	Sun, Windy	W	Sun, Windy	28,8	52	3	
2,2		F	2	W	Sun, Windy	W	Sun, Windy	29,1	52	2,4	
2,2		S	3	SW	Sun, Clouds	W	Small Rain, Wind	29,1	48	2,3	
2,2		Su	4	N	Frost, Sun	N	Sun	29,1	45	2,3	
2,3		M	5	N	Clouds, Sun, Windy	N	Sun, Clouds, Wind	29,75	47	2,4	
2,3		T	6	N	Frost, Sun	SW	Cloudy	29,75	45	2,3	
2,4		W	7	SW	Cloudy, Wind	S	Rainy, Wind	29,4	50	2,6	
2,3		T	8	N	Sun, Frost, Wind	NW	Frost	29,4	45	2,5	
2,1		F	9	S	Cloudy, Wind	SE	Cloudy, Windy	29,2	45	2,3	
2,9		S	10	SE	Foggy	SE	Cloudy, Wind, Sun, Rain	29,4	45	2,4	
2,15		Su	11	SE	Frost, Sun	SE	Sun	29,75	45	2,4	
3		M	12	S	Cloudy	S	Cloudy	29,75	45	2,5	
3,5		T	13	S	Cloudy	S	Cloudy	29,55	50	2,8	
5		W	14	S	Small Rain	S	Cloudy	29,65	50	2,7	
8		T	15	N	Cloudy, Sun	N	Cloudy	29,85	45	2,65	
		F	16	N	Foggy	N	Foggy	29,85	45	2,5	0,3



Month	Week	Moon's Age	Wind A M	Weather A M	Wind P M	Weather P M	Barome- ter	Thermo- meter	Hygrome- ter
Dec. 1	S	○ 17	N	Sun, Clouds	N	Sun, Clouds	29,85	47	2,5
2	Su	18	N	Sun, Cloudy	N E	Cloudy	29,9	47	2,5
3	M	19	N E	Hazy	N E	Hazy	29,7	45	2,5
4	T	20	E	Rainy	E	Hazy, Rain	29,6	44	2,55
5	W	21	E	Rainy	E	Hazy, Rain	29,5	42	2,7
6	T	22	E	Sun, Clouds	E	Cloudy	29,6	44	2,5
7	F	23	E	Hazy	E	Hazy	29,6	44	2,5
8	S	☾ 24	E	Cloudy, Sun, Cloudy	E	Small Rain, Rainy	29,4	44	2,5
9	Su	25	E	Cloudy	E	Cloudy	29,5	44	2,45
10	M	26	E	Sun, Cloudy	E	Cloudy	29,55	42	2,5
11	T	27	E	Hard Frost, Sun	E	Sun	29,6	42	2,3
12	W	28	E	Thaw, Cloudy	E	Sun, Clouds	29,65	42	2,3
13	T	29	E	Foggy	E	Sun, Fog, Mistling	29,6	45	2,6
14	F	30	E	Cloudy	E	Sun, Cloudy, Hazy	29,6	52	2,8
15	S	● 1	S	Hazy	S	Hazy	29,3	53	2,9
16	Su	2	S W	Sun	S W	Sun, Wind	29,35	57	3
17	M	3	N W N	Rain	N	Cloudy, Sun	29,5	54	3
18	T	4	S	Hazy	S	Hazy	29,5	54	2,75
19	W	5	S	Hazy	S	Mistling Rain	29,5	56	2,9
20	T	6	S W	Sun, Clouds	S W	Sun	29,55	53	2,85
21	F	7	S E	Cloudy, Hazy, Wind	S	Wind, Mistling	29,8	50	2,7
22	S	☽ 8	S	Sun, Clouds	S	Hazy	29,6	50	2,8
23	Su	9	S W	Sun, Clouds, Wind	S W	Cloudy, Windy	29,5	55	3,1
24	M	10	S W	Sun, Wind	S W	Sun, Wind	29,4	56	3,25
25	T	11	S W	Rain, Sun	W	Sun	29,65	50	2,75
26	W	12	S	Windy, Cloudy	S	Rainy, Windy	29,5	46	2,8
27	T	13	S	Sun	S	Sun, Clouds	29,6	50	2,8
28	F	14	S W	High Wind, Rain, Sun, Clouds	S W	High Wind, Sun, Clouds	29,3	55	3,1 0,5
29	S	15	S W	Sun, Clouds	S W	Sun, Hazy, Rainy	29,55	48	2,55
30	Su	○ 16	S W	Sun, Clouds	S W	Sun, Cloudy, Rain	29,6	48	2,5 0,5
31	M	17	W N W	Sun, Cloudy	N W	Cloudy	29,4	48	2,7

[ 45 ]

# R A I N 1781.

Inches.

January,	-	3,4
February,	-	1,8
March,	-	0
April,	-	0,5
May,	-	1
June,	-	3,1
July,	-	1,6
August,	-	1,6
September,	-	2,7
October,	-	0
November,	-	3,55
December,	-	2,4

Total 21,65

## R E M A R K S.

January 25, Thermometer at 17, (the lowest this year.)

28, Thermometer at 51, uncommon speedy thaw.

Feb. 11, 12, High wind.

13, Thunder and lightning at 10 P.M.

L

Feb.

Feb. 27, From 11 to 1 o'clock, the barometer fell from 28,95, to 28,7, then to 28,6, when heavy gusts of wind ensued.

April 16, Cuckow, { N. B. The swallow  
17, Swallow, { in other years usually a week before the cuckow.

August 12, Thermometer 82, (the highest this year.)

October 7, Swallows gone.

The greatest and least degrees of the barometer and hygrometer, may easily be fixed to their proper dates by mere inspection of their respective columns.

The rain that fell here this year, was 21,65 inches. The rain taken by Mr. Derham at Upminster in Essex was, on a mean of six years, 19,14 inches only ; for instance,

1700	—	19,03 inches
1701	—	18,69
1702	—	20,38
1703	—	23,99
1704	—	15,81
1705	—	16,93
		<hr/>
		114,83
		<hr/>
		6 19,14 nearly

This



This being the case, it may be wondered, that such uncommon dryness has shewn itself this year, as well here as in most other parts of England. Not to mention the insects, which have given just alarm in many places; the very ground took fire in the fens, and kept spreading, consuming the roots of trees and hedges, occasioned by their custom of paring and burning the turf on the surface, which communicated to the firm staple and soil itself. This dryness had malign effects in the autumn, on the health of the inhabitants of those parts and the adjacent counties.

Now the brooks scarce ever ran in the summers of the two preceding years, and the ponds were never full in the winter: so that the lands were exceedingly dry in the beginning of the year 1781; when in January there fell a good deal of rain, and some in February, but not enough to fill the ponds. And during all the month of March, when the winds are particularly drying, there was no rain; and very little till June. This dryness, attended with morning frosts, cut off the apples and potatoes; and the easterly winds, then greatly prevailing, produced

duced the blight and insects above complained of. In June, as I have said, there fell much hasty rain, which, however, soon ran off, and by the heat, and length of the day in that season, and the previous parched state of the earth, its effects were soon destroyed, and the brooks did not flow till November. This sufficiently accounts for the great dryness of the land, &c. notwithstanding there fell in the course of the year, an average quantity of wet compared with Mr. Derham's tables.

But it must be remembered, that the more we advance towards the west of the island, the greater the rain. For at Townly in Lancashire, there was 42  $\frac{1}{2}$  inches of rain: when at Upminster, there fell but 19  $\frac{1}{2}$  inches of rain: the westerly winds, loaded with the accumulated vapours of the vast Atlantic Ocean, being interrupted in their course, by the chain of the western mountains, discharge their main burden in those parts.

For at Upminster, there was no rain, and the morning was clear. This dryness, attended with a hot sun, cut off the supply of the westerly winds, and the easterly winds, then greatly prevailing, produced the drought.

